

REMARKS**§ 103(a) Rejections**

In the Office action, the examiner rejected independent claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Sakaguchi. For at least the reasons express below, it is respectfully submitted that *prima facie* obviousness has not been established.

Independent claim 1 calls for a filler material including a desiccant mixed into the filler material to seal the region between the front and back plates and a region between adjacent modules. Neither Asai nor Sakaguchi teach this limitation.

For example, the examiner concedes that Asai does not disclose a filler material including a desiccant mixed into the filler material filled between the front and back plates and surrounding each module. *See* Office action, paragraph 4.

Sakaguchi fails to cure the deficiency of Asai. In particular, the position that Sakaguchi does not disclose the concept of providing a filler material with a desiccant mixed therein in a region between adjacent modules of an array display and between front and back plates of a module is maintained.

Moreover, even if Sakaguchi did disclose a filler material with a desiccant mixed into the filler material to seal a region between adjacent modules, which he does not, the prior art does not motivate one to modify Asai as suggested in the Office action. For example, the examiner asserts that it would have been obvious to replace Asai's protective film with the filler material of Sakaguchi. *See* Office action, paragraph 7. A suggestion or motivation in Sakaguchi or Asai to modify Asai as proposed is lacking.

Specifically, in light of Asai's processing, it would not be obvious to simply replace the layer 21 of Asai with the filler material taught by Sakaguchi. For example, the examiner identifies layer 22 of Asai as disclosing a back plate. Asai's layer 22 is formed over the entire surface, including film 21. Column 7, 19-37; Figure 6. Through-holes are formed in the layer 22 and the protective film 21. Column 7, lines 38-41; Figure 7. Thereafter, a conductive layer 24 is formed on the entire surface, filling the through-holes for the metal electrodes 15. Column 7, line 64-column 8, lines 10. As shown in Figure 10 of Asai, the conductive layer 24 is processed into conductive patterns 25 and 26. *Id.*

The filler material of Sakaguchi is an inert liquid. Column 3, lines 16-18. In contrast, Asai's film 21 is an insulating material that is deposited by a technique such as sputtering or chemical vapor deposition. Column 7, lines 19-29; Figure 6. Referring to Figure 6, Asai lacks a structure that is capable of containing a liquid while enabling the application of the layer 22. For at least this reason it is believed that it would not be obvious to make the modification proposed in the Office action.

Furthermore, another hurdle could arise at least when the conductive layer 24 is formed. For example, Asai's conductive layer 24 fills through-holes 27, which extend to the metal electrodes 15. Figure 9. Without the film 21 it is not clear how the conductive layer 24 could contact the metal electrode 15. That is, if there were a space where Asai's layer 21 is depicted, which there is not, and that space could contain a liquid, when would Asai fill that space with Sakaguchi's liquid? If filled before forming the layer 24 the liquid would cover the electrode 15, preventing layer 24 from contacting the electrode. If the supposed space were left empty, the structure guiding deposition would be lacking. Moreover, referring to Figure 10, patterning the conductive layer does not leave an opening for the supposed space to be filled after depositing the conductive layer 24. Because there is no way to simply replace Asai's protective film with Sakaguchi's inert liquid it is respectfully submitted that, *prima facie* obviousness has not been established.

In the Office action it is asserted that the recitation of claim 1 "to seal the region between the front and back plates and a region between adjacent modules" is an intended use type limitation, and because Sakaguchi's filler material will seal Asai's regions between the front and alleged back plate, the prior art structure is capable of performing the intended use. *See* Office action, paragraph 8. Based on the explanation above, even if the sealing recitation is considered an intended use (for argument's sake), the prior art is not capable of the alleged intended use without a modification that is not suggested by the references.

Moreover, the use of the filler material to seal is not merely an intended use. For example, claim 1 recites a plurality of modules, and a front plate and a back plate. Claim 1 also recites a filler material including a desiccant mixed into the filler material. The filler material is not suspended in mid-air; rather, it is to seal the region between the front and back plates and a

region between adjacent modules. Thus, the filler material including a desiccant mixed into the filler material is included in the display in a way that will allow it to seal as claimed. Functional limitations are not inappropriate and they may be used to define a particular purpose that the element is to serve. See M.P.E.P. §2173.05(g) Functional Limitations. It is believed that the use of the filler material as claimed conveys a structure that is different from Asai and Sakaguchi. Thus, for this additional reason, *prima facie* obviousness has not been established with respect to claim 1 or claims dependent thereon.

Under a similar analysis, *prima facie* obviousness also has not been established for independent claims 11 or 27 and respective dependent claims.

With respect to dependent claims 5, 12, 14, and 15, the examiner concedes that Asai is silent regarding a dehydrating agent. Office action, paragraph 9. However, the examiner asserts that Sakaguchi teaches a dehydrating agent such as granular silica gel or a zeolite. Office action, paragraph 10. But, Sakaguchi is silent to the filler material including an epoxy. *Id.*, at paragraph 11. Nevertheless, the examiner concludes that would have been obvious to one having ordinary skill in the art to include epoxy in the filler material of Sakaguchi.

The examiner cites to *In re Leshin*, 125 USPQ 416 to support his conclusion that it would have been obvious to include an epoxy in Sakaguchi's recited filler material such as perfluoroalkane or perfluoroamine. In *In re Leshin*, a prior art reference provided evidence of a plastic container that was similar to that of the appellant's claimed container. *In re Leshin*, 125 USPQ 416, 417 (CCPA 1960). Moreover, the appellant conceded that the plastics he uses were well known. *Id.* The court concluded "the selection of the plastics being on the basis of suitability for the intended use, would be entirely obvious." *Id.*, at 418. In contrast, in the present Office action, no evidence has been provided to show that epoxy is commonly mixed with the inert liquids perfluoroalkane or perfluoroamine. Additionally, neither of the cited references disclose a display comprising a filler material including a desiccant mixed into the filler material to seal the region between the front and back plates and a region between adjacent modules. The burden is on the examiner to establish *prima facie* obviousness; there is no requirement for the applicant to do testing or provide analytical data. For at least these reasons, it is submitted that *prima facie* obviousness has not been established for claims 5, 12, 14, and 15.

Dependent claim 18 calls for securing an array of modules to a carrier with a filler material including a desiccant mixed into the filler material. While Sakaguchi does use an epoxy adhesive to adhere a single sealing cap 9 to an anode 2 (in some instances), there is no indication that the epoxy includes a desiccant, or that Sakaguchi secures an array of modules to a carrier with a filler material including a desiccant mixed into the filler material, the modules of the array surrounded by the filler material. Column 4, lines 23-32. Thus, *prima facie* obviousness has not been established for dependent claims 18 or 24.

Dependent claim 19 calls for forming a lip of filler material including desiccant that extends beyond the periphery of the array modules and the carrier. The examiner cites to Sakaguchi, at Figure 1 at 14 as showing a lip of filler material that includes a desiccant. As shown in Figure 1, reference number 14 points to an opening in the cap structure 9. The opening is in the cap structure and does not extend beyond the outer boundary of the cap structure. Accordingly, *prima facie* obviousness has not been established for claims 19 and 25.

CONCLUSION

Because *prima facie* obviousness has not been established for independent claims 1, 11, or 27 the independent claims and claims dependent thereon are distinguished over the cited art.

In view of the amendments and remarks herein, the application is believed to be in condition for allowance. The examiner's prompt action in accordance therewith is respectfully requested. The commissioner is authorized to charge any additional fees, including extension of time fees, or credit any overpayment to Deposit Account No. 20-1504 (ITL.0618US).

Respectfully submitted,

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